

L	Table L/ D=15	Actual L/ D=15.17	Table L/ D=16
Table 420	30.4	25.2
Actual 424.80	r	a	s
Table 430	33.3	27.9

Interpolation:

$r = 30.4 + 0.48 (33.3 - 30.4) = 31.79$

$s = 25.2 + 0.48 (27.9 - 25.2) = 26.50$

$a = r - 0.17 (r - s) = 31.79 - 0.17 (31.79 - 26.50) = 30.89$ inches

(6) For the following vessels with a load line mark, the upper edge of the tonnage mark must be located at the level of the uppermost part of the load line grid:

(i) Vessels assigned only one gross and one net tonnage under § 69.175(c).

(ii) Vessels for which a load line assigning authority certifies that the vessel's load line mark was located as though the second deck were the freeboard deck.

(b) *Line for fresh and tropical waters.*

(1) Except as under paragraph (b)(4) of this section, a horizontal line for fresh and tropical waters may be assigned at the vessel owner's request.

(2) The line must be nine inches long and one inch wide and located above and to the left of the tonnage mark at a distance equal to one forty-eighth of the distance from the top of the flat keel to the tonnage mark. The tonnage mark and the line for fresh and tropical waters must be connected by a vertical line one inch wide. (See the figure in § 69.183(a).)

(3) The line for fresh and tropical waters must be designated by a welded bead or other permanent mark nine inches long placed along the upper edge of the line.

(4) For vessels with a load line mark, if the load line assigning authority certifies that the load line mark was located as though the second deck were the freeboard deck, a line for fresh and tropical waters must not be placed on the vessel.

(c) *Freeboard deck mark.* A vessel assigned two gross and two net tonnages which has more than one deck and no load line mark assigned must have a mark on each side of the vessel with the same dimensions and location as the freeboard deck line mark under

§ 42.13-20 of this chapter, except that the mark must be located directly above the tonnage mark.

(d) *The line of the second deck.* The line of the second deck must not be marked on the side of the vessel.

(e) *Color of markings.* All markings under this section must be maintained in either a light color on a dark background or a dark color on a light background.

§ 69.179 Certification of markings.

(a) Before a certificate of measurement is issued for a vessel requiring a tonnage mark, a certification by a measurement organization under § 69.15 that all markings meet the requirements of this subpart is required.

(b) The Coast Guard, at any time, may verify markings under this subpart.

§ 69.181 Locating the line of the second deck.

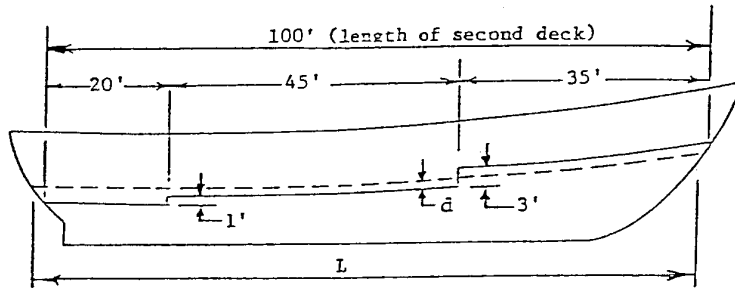
(a) If the second deck is not stepped, the line of the second deck is the longitudinal line of the underside of the second deck at the side of the hull.

(b) If the second deck is stepped (as in the examples following this paragraph), the line of the second deck is a longitudinal line extended parallel to each portion of the second deck and located at the height of the underside of the amidships portion of the second deck at the side of the hull—

(1) Plus, for each stepped portion of the second deck higher than the second deck at amidships, a distance equal to the length of the stepped portion divided by the total length of the second deck times the height that the step is above the height of the amidship portion of the second deck; and

(2) Minus, for each stepped portion of the second deck lower than the second deck at amidships, a distance equal to the length of the stepped portion divided by the total length of the second deck times the height that the amidship portion of the second deck is above the height of the step.

EXAMPLE: (1)

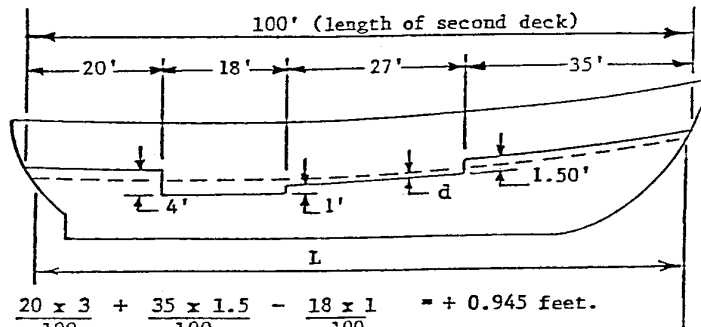


L = Length of the line of the second deck.

d = Distance from amidship portion of second deck to line of second deck.

$$d = \frac{35 \times 3}{100} - \frac{20 \times 1}{100} = + 0.85 \text{ feet.}$$

EXAMPLE: (2)



$$d = \frac{20 \times 3}{100} + \frac{35 \times 1.5}{100} - \frac{18 \times 1}{100} = + 0.945 \text{ feet.}$$

§ 69.183 Figures.

(a) Tonnage mark with an equilateral triangle and a line for fresh and tropical waters.

